



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/765,899

01/29/2004

Masanori Amano

032111

2604

38834

7590

03/16/2009

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

1250 CONNECTICUT AVENUE, NW

SUITE 700

WASHINGTON, DC 20036

EXAMINER

SIMONE, CATHERINE A

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/765,899

Applicant(s)

AMANO ET AL.

Examiner

Catherine Simone

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5, 7, 9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) 5, 7, 9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Withdrawn Rejections

1. The 35 U.S.C. 112, first paragraph, rejection of claims 1-4 of record in the previous Office Action mailed 8/4/2008, Pages 3-4, Paragraph #6 has been withdrawn due to the Applicant's amendment filed 12/2/2008.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 2002/0047560 A1) in view of Amano et al. (JP 2002-293049; refer to the translation of record).

Regarding claim 1, Lee et al. teach a layer forming relief for transferring and printing an application fluid such as an organic luminous substance (paragraph 0008) applied on printing convex portions on a printing object, the layer forming relief comprising the printing convex portions formed as linear strips and aligned to be parallel with each other with a pitch (Figs. 4, 6A, 6B, 9B and 11B, strips/lands 12; paragraph 0028), and a plurality of micro-projections on top faces of each of the printing convex portions (Figs. 6A, 9B and 11B, areas between indentations 12a) and grooves (Figs. 6A, 9B and 11B, indentations 12a) between adjoining micro-projections for retaining the application fluid (paragraph 0028), wherein the pitch of the

printing convex portions (Figs. 9B, 9C, 11B and 11C, convex portions 12) is deemed to be substantially equal to a width of one pixel printed on the printing object (see Figures 8-11; and paragraphs 0035-0039).

However, Lee et al. fail to teach the micro-projections being formed into a truncated cone or in a cylinder. Additionally, Lee et al. fails to teach the height of the micro-projections being in the range of 2 to 50 μm , the space between adjoining micro-projections being 7 μm or more, the diameter of the top face of the micro-projections being 5 μm or more, and the number of micro-projections being in the range of 2 to 30.

Amano et al. teach that it is well known in the art to have a layer forming relief including micro-projections formed of a truncated cone or cylinder shape (see paragraph 0010, lines 1-2), and further the height of the micro-projections being in the range of 2 to 50 μm (see paragraph 0019, lines 9-10), the space between adjoining micro-projections being 7 μm or more (see paragraph 0019, lines 7-9), the diameter of the top face of the micro-projections being 5 μm or more (see paragraph 0020), and the number of micro-projections being in the range of 2 to 30 (see paragraph 0017) for the purpose of preventing the occurrence of a marginal phenomenon and ensuring formation of an orientation film having an even thickness when printing and transferring a coating liquid onto an object.

The micro-projections (areas between indentations 12a) in Lee et al. are analogous to the micro-projections in Amano et al., since they both are being used for transferring and printing a liquid applied thereon onto a printing object.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the micro-projections of the convex portions in Lee et al.

to be in the form of a truncated cone or a cylinder shape and have the height of the micro-projections be in the range of 2 to 50 μm , the space between adjoining micro-projections be 7 μm or more, the diameter of the top face of the micro-projections be 5 μm or more, and the number of micro-projections be in the range of 2 to 30 as suggested by Amano et al. in order prevent the occurrence of a marginal phenomenon and ensure formation of an orientation film having an even thickness when printing and transferring a coating liquid onto an object.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 2002/0047560 A1) in view of Komura (JP 2003-029271; refer to the computer translation of record).

Regarding claim 3, Lee et al. teach a layer forming relief for transferring and printing an application fluid such as an organic luminous substance (paragraph 0008) applied on printing convex portions on a printing object, the layer forming relief comprising the printing convex portions formed as linear strips and aligned to be parallel with each other with a pitch (Figs. 4, 6A, 6B, 9B and 11B, strips/lands 12; paragraph 0028), and a plurality of micro-projections on top faces of each of the printing convex portions (Figs. 6A, 9B and 11B, areas between indentations 12a) and grooves (Figs. 6A, 9B and 11B, indentations 12a) between adjoining micro-projections for retaining the application fluid (paragraph 0028), wherein the pitch of the printing convex portions (Figs. 9B, 9C, 11B and 11C, convex portions 12) is deemed to be substantially equal to a width of one pixel printed on the printing object (see Figures 8-11; and paragraphs 0035-0039).

However, Lee et al. fail to specifically teach projected micro-stripes on the top faces of the convex portions wherein a cross section of the projected micro-stripes in a direction perpendicular to a longitudinal direction is trapezoidal or rectangular, and the height of the projected micro-stripes being in the range of 2 to 55 μm , the space between adjoining projected micro-stripes being 7 μm or more, the width of the top face of the projected micro-stripes being 3.5 μm or more, and the number of the projected micro-stripes being in the range of 2 to 33.

Komura teaches a layer forming relief including projected micro-stripes on the top faces of each linear relief part and grooves between adjoining micro-stripes wherein a cross section of the projected micro-stripes in a direction perpendicular to a longitudinal direction is trapezoidal (Drawing 3), and the height of the projected micro-stripes is in the range of 2 to 55 μm (paragraph 0012), the space between adjoining projected micro-stripes is 7 μm or more (paragraph 0018), the width of the top face of the projected micro-stripes is 3.5 μm or more (paragraph 0018), and the number of the projected micro-stripes is in the range of 2 to 33 (Drawings 3, 6 and 7) for the purpose of transferring a large amount of sealing agent and for preventing a place with no sealing agent transferred from being generated and making an edge of a transferred sealing agent to be sharp (see abstract).

The relief structures provided on the linear convex portions in both Lee et al. and Komura are analogous, since both are being provided for printing and transferring an application fluid onto a printing object.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the top faces of the convex portions in Lee et al. to have a plurality of projected micro-stripes with grooves therebetween, wherein the cross-section of the projected

micro-stripes in a direction perpendicular to a longitudinal direction is trapezoidal, and the height of the projected micro-stripes is in the range of 2 to 55 μm , the space between adjoining projected micro-stripes is 7 μm or more, the width of the top face of the projected micro-stripes is 3.5 μm or more, and the number of the projected micro-stripes is in the range of 2 to 33 as suggested by Komura in order to transfer a large amount of solution and for preventing a place with no solution transferred from being generated and making an edge of a transferred solution to be sharp.

Response to Amendment

5. The declaration under 37 CFR 1.132 filed 12/2/2008 is insufficient to overcome the rejection of claim 1 based upon Lee et al. and Amano et al. applied under 35 U.S.C. 103 and the rejection of claim 3 based upon Lee et al and Komura applied under 35 U.S.C. 103 as set forth in the last Office action because: the declaration fails to set forth facts and the showing is not commensurate in scope with the claims. The declaration is opinion evidence providing no factual evidence to support the conclusory statements given. See MPEP 716.01(c) (III). "An affidavit or declaration under 37 CFR 1.132 must compare the claimed subject matter with the closest prior art to be effective to rebut a *prima facie* case of obviousness". MPEP 716.02(e). Furthermore, the declaration refers only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716. In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Response to Arguments

6. Applicant's arguments filed 12/2/2008 have been fully considered but they are not persuasive.

Applicants argue "it would have been expected that the combination of Lee and Amano would result in a printing plate which would print strips lacking uniformity, unless a barrier rib was added. However, the printing convex portions having the micro-projections as claimed provides for the unexpected result of the ability to print highly precise and fine patterns having uniformity, without the need for barrier ribs".

This is not deemed persuasive. As shown above, the Declaration under 37 CFR 1.132 filed 12/2/2008 is insufficient to overcome the rejection of claim 1 based upon Lee et al. and Amano et al. applied under 35 U.S.C. 103 as set forth in the last Office action because the declaration fails to set forth facts and the showing is not commensurate in scope with the claims. The declaration is opinion evidence providing no factual evidence to support the conclusory statements given. See MPEP 716.01(c) (III). "An affidavit or declaration under 37 CFR 1.132 must compare the claimed subject matter with the closest prior art to be effective to rebut a *prima facie* case of obviousness". MPEP 716.02(c). Furthermore, the declaration refers only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716. Additionally, it is to be noted that the features upon which applicant relies (i.e., *uniformity, without the need for barrier ribs*) are not recited in the rejected claim. Although the claims are interpreted in light of the specification,

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In view of the foregoing, claim 1 remains unpatentable over Lee et al. in view of Amano et al.

Applicants also argue “it would have been expected that the combination of Lee and Komura would result in a printing plate which would print strips lacking in uniformity and sharpness, unless a barrier rib was added. However, the printing convex portions having the micro-projections as claimed provides for the unexpected result of the ability to print highly precise and fine patterns which are uniform and have sharpness, without the need for barrier ribs”.

This is not deemed persuasive. As shown above, the Declaration under 37 CFR 1.132 filed 12/2/2008 is insufficient to overcome the rejection of claim 1 based upon Lee et al. and Amano et al. applied under 35 U.S.C. 103 as set forth in the last Office action because the declaration fails to set forth facts and the showing is not commensurate in scope with the claims. The declaration is opinion evidence providing no factual evidence to support the conclusory statements given. See MPEP 716.01(c) (III). “An affidavit or declaration under 37 CFR 1.132 must compare the claimed subject matter with the closest prior art to be effective to rebut a *prima facie* case of obviousness”. MPEP 716.02(c). Furthermore, the declaration refers only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716. Additionally, it is to be noted that the features upon which applicant relies (i.e., *uniform and have good sharpness, without the need for barrier ribs*) are not recited in the rejected claim. Although the claims are interpreted in light of

the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In view of the foregoing, claim 3 remains unpatentable over Lee et al. in view of Komura.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571) 272-1501. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Catherine Simone/
Examiner, Art Unit 1794

/JENNIFER MCNEIL/
Supervisory Patent Examiner, Art Unit 1794